Development of science and technology -in the filed of telecommunication

1484. SHRI SUBAS MOHANTY: Will, the Minister of COMMUNICATIONS be pleased to state;

(a) Whether certain areas had been, chosen for the development of technology in the field of telecommunications during the Seventh Five Year Plan period;

(b) if so, what are the details thereof; and

. (c) the extent to which the targets have been achieved in the development of SPC-2 local and trunk automatic exchanges, telematic services, computer programmes for local and national network planning etc. ?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS (SHRI GIRIDHAR GOMANGO) : (a) Yes, Sir.

(b) The areas chosen for the development of Science and technology in the field of telecommunication during the Seventh Plan of DOT are (i) Digital large local exchange and absorption of technology of digital exchanges; (ii) Digital small exchanges; (iii) Improvement to subscriber terminal equipment and provision of new services; (iv) Improvement to telex, telegraph and data, external plant and network plan; (v) Radio systems, (vi) Line transmission systems and (vii) Satellite systems.

(c) *SPC-2 Local and Trunk Automatic exchanges-*

The SPC-2 technology concerns itself to stored programme controlled techniques relating to the digital exchanges. Digital electronic exchanges both local and trunk based on E-10B technology are now being manufactured in the country and are already successfully integrated in the DOT network.

The Centre for Development of Telematics (C-DOT) has been developing digital exchanges based on indigenous technology. A field trial exchange is under installation at Ulsoor in Bangalore.

Telematic services

(i) Telematic services, viz. Teletex, Videotex, Telefac and Electronic Mail are planned to be introduced.

(ii) Telefax has already been field tried in the netwok and commercially introduced in telecommunication network.

(iii) Teletex has been experimented in the network and its commercial introduction is under consideration.

(iv) Regarding Electronic Mail and Videotex services, these will be experimented during the year 1989-90.

Computer Programmes for local National network planning etc.

(i) The computer programmes for local and National Network Planning were procured by DOT from M/s. SOFRECOM, France with a view to use these programmes for computer aided planning of telecom networks. These programmes were to be converted for use on computer available with DOT and were also to be adapted to Indian network conditions. These programmes have already been converted for use on ICL computer of all the four Metro Telephone Districts for use by the network planners in the field. The adaptation of programmes to Indian network conditions has mostly been completed.

(ii) In order to introduce computer aided network planning (CANP) in the field units, workshops to train the field engineers in use of computer programmes are being conducted from time to time.

(iii) Using the converted software, a few case studies of Metro, Major telephone districts and national network for seventh plan requirements were undertaken. "Network studies of Bombay, Ahmedabad and National Net Work period are in progress. The studies have indicated the possibilities of optimising the investments.